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AIR FORCE OFFICE OF SCIENTIFIC RESEARCH

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RESEARCH PROPOSAL QUARTERLY STATUS REPORT

AIR FORCE OFFICE OF SCIENTIFIC RESEARCH (AFOSR)
NOTICE OF RESEARCH PROPOSAL (AFOSR)
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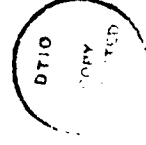
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RESEARCH PROPOSAL

QUARTERLY STATUS REPORT

OCTOBER 1991

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INTRODUCTION

The Research Proposal Quarterly Status Report is published in March, June, September, and December by the Air Force Office of Scientific Research (AFOSR). It lists all the research proposals received by AFOSR in the previous six months along with the action taken (Initiated, Declined or Withdrawn) on each report.

The report is divided into two parts. The Institution Index lists proposals alphabetically by institution. This is followed by a more detailed listing by Directorate, and by Program Manager within the Directorate.

PURPOSE

This report is designed to inform other Government sponsoring agencies of the proposals received by the AFOSR and the action taken on these proposals. Readers must keep in mind that declined proposals should not necessarily be considered as scientifically unacceptable; many declinations result from a lack of funds or as a result of special programmatic emphasis.

AFOSR MISSION

The Air Force Office of Scientific Research (AFOSR) is the single manager of the Air Force Defense Research Sciences Program (Program Element 61102F) and the primary Air Force agency for the extramural support of fundamental scientific research. The AFOSR is organized under the Air Force Systems Command, DCS/Technology.

AFOSR awards grants and contracts for research in areas of science relevant to the needs of the Air Force. Research is selected for support from proposals received in response to the Broad Agency Announcement from scientists investigating problems involving the search for new knowledge and the expansion of scientific principles. Selection is on the basis of scientific potential for improving Air Force operational capabilities, originality, significance to science, the qualification of the principal investigators, and the reasonableness of the proposed budget.

KEY TO READING THE DATA

TITLE - The title of the research proposal

INSTITUTION - The organization, (e.d., college/university, company) at which the research will be conducted.

INVESTIGATOR - The Principal Investigators proposing the research.

TYPE - N indicates a new research effort.

- R indicates a continuation of an ongoing research effort.

MONTHS - The duration of the research proposal.

RECEIVED - The month and year in which the AFOSR received the proposal.

AMOUNT - The funds requested of the AFOSR for support of the research proposal.

STATUS - A = ACCEPTED indicates that the review has been completed and the proposal recommended for funding.

- D = DECLINED indicates the proposal has been reviewed but will not be funded by the AFOSR.

- BLANK SPACE = indicates the proposal is being reviewed.

- W = WITHDRAWN indicates that the proposal submitted was removed from further consideration at the proposers request.

PROGRAM MANAGER - The AFOSR scientific staff member assigned the responsibility for the technical evaluation of the proposal.

PROPOSAL # - An AFOSR Directorate assigned control number to uniquely identify the research proposal.

INITIATE - The proposal has been recommended to the AFOSR Directorate of Contracts for the amount and duration.

START DATE - The recommended date for commencement of the research.

TOTAL AMOUNT - The estimated number of dollars recommended for support of the research effort; the actual amount is subject to negotiation.

AIR FORCE OFFICE OF SCIENTIFIC RESEARCH SCIENTIFIC STAFF DIRECTORY
BOLLING AIR FORCE BASE, DC 20332

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Dr Amrutur Srinivasan	4935
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PART 1

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STATUS - 'A' = ACCEPTED, 'D' = DECLINED, 'W' = WITHDRAWN

INSTITUTION	LAST NAME	INVESTIGATOR	FIRST NAME	MIDDLE	PROPOSAL	STATUS	PM NAME
10th Military Airlift Wing	Baumann		Daniel	D	91-NI-029	A	BOLAND
	Carlson, Jr.		Herbert	C	91-NI-036	A	BOLAND
	Gardis		John	G	91-NI-028	A	BOLAND
	Schepler		Kenneth	L	91-NI-032	A	BOLAND
Aerodyne Research Inc	Troan		R.	C	91-NC-262	A	BURGGRAF
Air Force Institute of Technology	Beller		Denis	E	91-XO-029	A	EWING
	Suter		Gruce	E	91-NM-372	A	SJOGREN
Air Force Office of Scientific Research	Scientist		Idiot	C	91-XO-033	A	EWING
	LKEJ:LAKJ		S:LKJ	I	91-XO-034	A	EWING
	Mages		Mary Ann		91-NA-264	A	SAKELL
Air Force Weapons Lab	Finn		Mary Ann		91-NA-265	A	SAKELL
Analytic Services Inc	Robert		Robert		91-XO-030	A	YORK
Auburn University	Thakur		Mrinal		91-NC-252	A	LEE
Amara, Inc.	Jayler		Karl		91-NM-320	A	SJOGREN
IBM Corporation	Haney		Michael	W	91-NE-254	A	CRAIG
Boston University	Kotunga		P. Robert		91-NM-337	A	NACHMAN
	Lee		Min-Chang		91-NL-145	A	STOBIE
Brace University	Fleming		Jendell	H	91-NM-378	A	JACOB
	Lawandy		Nabil	M	91-NE-252	A	SCHLOSSBER
	Paradiso		Michael	A	91-NL-127	A	TANGNEY
	Sheldon		Grian	W	91-NC-223	A	ERSTFELD
	Culick		Fev	E	91-NA-244	A	BIRKAN
California Institute of Technology	Harder		Seth		91-NA-262	A	BIRKAN
	McEliece		Robert	J	91-NC-222	A	LEE
	Psaltis		Demetri		91-NM-303	A	GLASSMAN
Carnegie-Mellon University	Kumta		Prashant		91-NE-256	A	CRAIG
	O'Hallaron		David	R	91-NC-219	A	HEDBERG
	Patterson		G.	D	91-NM-361	A	LUPO
	Hauer		A		91-NC-208	A	LEE
Case Western Reserve University	Radack		Gerald	H	91-NA-260	A	JONES
	Gukonik		Chaim	M	91-NI-027	A	BOLAND
Clarkson University	Metijevic		Egon	N	91-NC-225	A	HEDBERG
Colorado State University	Martin		Charles	R	91-NC-263	A	ERSTFELD
Columbia University	Chu		C	K	91-NC-248	A	WILKES
	Potasek		M	J	91-NL-152	A	STOBIE
Combustion Institute	Calicote		M.	F	91-NM-345	A	NACHMAN
Cornell University	Houston		Paul	L	91-NA-243	A	BIRKAN
	Hui		Chung-Yuen		91-NC-272	A	BERMAN
	Lumley		J	L	91-NA-250	A	JONES
	Nation		John	A	91-NA-261	A	MCMICHAEL
	Parpia		Jeevak	M	91-NE-230	A	BARKER
Duke University	Rejan		Adrian		91-NE-243	A	WEINSTOCK
	Virgin		Laurence	N	91-NE-244	A	WEINSTOCK
	Wells		Richard	L	91-NA-270	A	FANT
	Schulz		William	D	91-NA-233	A	WU
Eastern Kentucky Univ.	Elshakoff		I		91-NC-205	A	ERSTFELD
Florida Atlantic University					91-NI-031	A	BOLAND
					91-NA-223	A	WU

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INSTITUTION	INVESTIGATOR	LAST NAME	FIRST NAME	MIDDLE	PROPOSAL	STATUS	PM NAME
General Electric Co	Hoffman	Hoffman	Frederick		91-NM-317	A	WAKSHAM
George Washington University	McKee	McKee	Douglas		91-NC-247		BURGGRAF
	Lahner	Lahner	Rainald		91-NA-229	A	SAKELL
	Singpurwalla	Singpurwalla	V		91-NM-349	A	SJOGREN
Georgetown University	Kertesz	Kertesz	Viklos		91-NC-244		BURGGRAF
Georgia Institute of Tech	Serfno	Serfno	Richard		91-NM-206	A	SJOGREN
Georgia Tech Research Corporation	Talreja	Talreja	Ramesh		91-NA-237		JONES
Georgia Univ Research Foundation Inc	Gritton	Gritton	Bruce	K	91-NL-146		FREGLY
Jordon Research Conferences Inc	Macdonald	Macdonald	Digby	D	91-NC-240		WILKES
Harry E. Moses Apollimath	Moses	Moses	Harry	E	91-NM-366		NACHMAN
Harvard University	Grosz	Grosz	Barbara	J	91-NM-323		WAKSHAM
	Mitchell	Mitchell	Ralph		91-NC-226	A	HEDBERG
Howard University	Bainum	Bainum	Peter	M	91-NA-220	A	WU
Hughes Aircraft Co	Butler	Butler	Jennifer	M	91-NE-231	A	BARKER
Illinois Institute of Technology	Ben-Arie	Ben-Arie	Jezeziel		91-NM-310		WAKSHAM
Illinois State University	Walczyk	Walczyk	Jeffrey	J	91-NL-151		FREGLY
Inst. of Electrical & Electronics Engrs	Lorenzo	Lorenzo	Joe		91-NE-246		POMRENKE
	Angeman	Angeman	Robert	T	91-NE-214		POMRENKE
Johns Hopkins University	Andreou	Andreou	Andreas	G	91-NM-342		SUDDARTH
	Meng	Meng	Ching	I	91-NL-139	A	RADOSKI
	Yarkony	Yarkony	David	R	91-NC-274		BURGGRAF
	Jiang	Jiang	Hongxing		91-NE-223		POMRENKE
	Gould	Gould	Edwin	S	91-NC-213		HEDBERG
Kansas State University	Jodanoff	Jodanoff	John	L	91-NA-257		WU
Kent State University	Leung	Leung	Ka-Ming		91-NP-184	A	LUPO
Kozim, Jodanoff & Associates Inc	Erdoğan	Erdoğan	Fazil		91-NA-224		BOYCE
Lawrence Berkeley Laboratory	Rockwell	Rockwell	Donald	O	91-NA-269	A	FANT
Lehigh University	Calawa	Calawa	Arthur	R	91-NE-218	A	WITT
	Davis	Davis	Paul	R	91-NP-188	A	BARKER
Lincoln Laboratory/MIT	Miller	Miller	Warner	A	91-NP-185	A	LUPO
Linfield Research Institute	Calawa	Calawa	Arthur	R	91-NE-224		WITT
Los Alamos Nat'l Lab--Appl Theor Phys Div	Sekefi	Sekefi	George		91-NE-262		BARKER
MIT -- Lincoln Lab	Chang-Diaz	Chang-Diaz	F	R	91-NA-249	A	BIRKAN
Massachusetts Institute of Technology	Cleary	Cleary	Michael	P	91-NA-272		JONES
	Lee	Lee	Min-Chang		91-NE-221	A	BARKER
	Lighton	Lighton	Frank	T	91-NM-370	A	GLASSMAN
	Oppenheim	Oppenheim	Alan	V	91-NM-371		SJOGREN
	Papaefthymiou	Papaefthymiou	Georgia	C	91-NC-220		ERSTFELD
	Poggio	Poggio	Tomaso		91-NM-314		WAKSHAM
	Simuels	Simuels	Richard	J	91-NL-012	A	CAVENDER
	Ullman	Ullman	Shimon		91-NM-313		WAKSHAM
	Tallance	Tallance	John		91-NC-214		ERSTFELD
Materials Research Society	Qenschler	Qenschler	C.	L	91-NC-260		BURGGRAF
	Pike	Pike	John	M	91-NE-217	A	CRAIG
Materials Technologies Corporation	Clicker	Clicker	Vladimir	I	91-NM-309	A	NACHMAN
Matix Inc	Blanchard	Blanchard	Gary	J	91-NC-250		LEE
Michigan State University	Ponallo	Ponallo	Bob		91-NA-239	A	SAKELL
NASA - Ames Research Center	Ajello	Ajello	Joseph	M	91-NP-187	A	KELLEY
NASA - Natl Aeronautical and Space Admin							

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INSTITUTION	LAST NAME	INVESTIGATOR	FIRST NAME	MIDDLE	PROPOSAL	STATUS	PM NAME
National Inst. of Standards & Technology	Wineland		David	J	91-NP-183		KELLEY
National Oceanic and Atmospheric Admin	Westwater		Ed	R	91-NC-211		STOBIE
National Research Council	Raber		Douglas		91-NC-259		LEE
National Science Foundation	Teill		Daniel		91-NP-190	A	LEWKOWICZ
Naval Post Graduate School	Bradley		Gordon	H	91-XO-031	A	YORK
Naval Research Laboratory	Stackpole		Laurie		91-NM-367	A	GLASSMAN
	White		Joseph		91-XO-032	A	OWENS
	Barnden		John		91-NE-248	A	KELLEY
New Mexico State University	Garabedian		Paul	R	91-NM-308		WAKSMAN
New York University	Rodman		Laura	C	91-NM-362		NACHMAN
Nielsen Engineering and Research Co	Iyer		Shanthi		91-NL-149		STOBIE
North Carolina A&T State University	Cedair		Salan	M	91-NE-204		POMRENKE
North Carolina State University	Campbell		Stephen	L	91-NE-250		POMRENKE
	Kallay		C. T.		91-NM-359		JACOBS
	Skavanski		Alexander	A	91-NM-377		GLASSMAN
Northeastern University	Keer		Leon	M	91-NL-128		TANGNEY
Northeastern University	Liu		Wing	K	91-NA-252	A	JONES
	Mura		Toshio		91-NA-276		WU
Office of Naval Research	Reynolds		Peter		91-NA-213		BOYCE
Ohio State Univ Research Foundation	Bodonyi		Richard		91-NP-189	A	KELLEY
	Herbert		Thorwald		91-NM-352		NACHMAN
	Rapp		Robert	A	91-NA-239	A	SAKELL
Oklahoma State University	Cord		Warren	T	91-NC-206		BURGGRAF
	Raff		Lionel	M	91-NC-230		LEE
Old Dominion University	Rao		Nageswara S	V	91-NC-266		BURGGRAF
	Schoenbach		Karl	H	91-NM-324		WAKSMAN
Oregon Graduate Center for Study & Resch	Sigmon		Thomas	M	91-NP-186	A	LUPO
Oregon State University	D'Ambrosio		Bruce		91-NE-264	A	WITT
	Hernried		Alan	G	91-NM-316		WAKSMAN
	Sleight		Arthur	W	91-NA-253		WU
Parkview Jorks, Inc.	Hohenearter		Gert	K	91-NE-207	A	WEINSTOCK
Pennsylvania State University	Belegundu		Ashok	D	91-NE-242	A	WEINSTOCK
	Chung		T.	C	91-NA-232		WU
	Grutzeck		Michael	W	91-NC-257		BURGGRAF
	Macdonald		Digby	D	91-NC-234		ERSTFELD
	Santoro		Robert	J	91-NC-253		WILKES
	Settles		Gary	S	91-NA-246	A	TISHKOFF
	Jewell		Jack		91-NA-256		SAKELL
Photonics Research Inc.	Davis		Steven	J	91-NE-259		CRAIG
Physical Sciences Inc	Kalkhoran		Iraj	M	91-NC-259		BERMAN
Polytechnic Institute of New York	Salzinger		Kurt	N	91-NA-225		SAKELL
Polytechnic University	Johnson-Laird		Philip		91-NL-144		HADDAD
Princeton University	Ju		Jiann-Wen		91-NL-132		FREGLY
	Liu		Chung-King	M	91-NA-255		WU
	Nosenchuck		Daniel		91-NA-268	A	TISHKOFF
	Seits		Alexander	J	91-NA-247	A	SAKELL
	Suckewer		Szymon		91-NA-279		SAKELL
					91-NE-253		SCHLOSSBER

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INSTITUTION	LAST NAME	FIRST NAME	MIDDLE	PROPOSAL	STATUS	PM NAME
Queens College	Cadieu	Fred	J	91-NE-257	A	WEINSTOCK
Rensselaer Polytechnic Institute	Cole	Julian	D	91-NM-322	A	NACHMAN
	Interrante	Leonard	V	91-NC-217		ERSTFELD
	Levi	Mark		91-NM-330	A	NACHMAN
Rome Air Development Center	Stayskal	Mans	P	91-NI-034	A	BOLAND
Rutgers, The State Univ. Coll of Engineering	Knight	Doyle	D	91-NA-271		SAKELL
	Weng	George	J	91-NA-231		WU
Utterse The State University	Shen	Phillip Chen-Yu		91-NM-311		HOLLAND
ISI International	Shockey	Donald	A	91-NE-211	A	ROSENSTEIN
San Diego State University Foundation	Reed	Stephen	K	91-NL-137		FREGLY
Society for Optical/Quantum Electronics	Corcoran	V. J.		91-NE-263	A	SCHLOSSBER
Society for Research on Bio Rhythms	Turek	Fred	W	91-NL-131		HADDAD
Southern Methodist University	Kennington	Jeffery	L	91-NM-331	A	GLASSMAN
Southwest Research Institute	Davidson	David	L	91-NE-210	A	ROSENSTEIN
Stanford University	Ferziger	Joel	H	91-NA-267		FANT
	Moin	Parviz		91-NA-214	A	SAKELL
	Tsai	Stephen	Y	91-NA-218		BOYCE
State University of New York	Gurvitch	Michael	A	91-NE-206	A	WEINSTOCK
	Osteryoung	Robert		91-NC-261	A	WILKES
	Lagrange	John	E	91-NA-225	A	FANT
Syracuse University	Gal-Cr	Benjamin		91-NA-258		FANT
Technion-Israel Inst of Technology	Bloom	Justin	L	91-NI-030	A	CAVENDER
Technology International, Inc.	Sullivan	Thomas		91-NE-212		WEINSTOCK
Temple University	Cassone	Vincent	M	91-NL-143		HADDAD
Texas A and M Research Foundation	Junkins	John	L	91-NA-254		WU
	Ziener	Klaus	M	91-NE-234		BARKER
Texas Tech University	Leonard	B P		91-NA-236		MCMICHAEL
Univ of Akron	Dror	Moshe		91-NM-334		GLASSMAN
Univ of Arizona	Sarid	Dror		91-NE-232	A	SCHLOSSBER
	Wynanski	Israel	J	91-NA-235	A	MCMICHAEL
Univ of California	Rovers	Michael	T	91-NC-210	A	BERMAN
	Chan	Tsu-Shuan		91-NM-304		GLASSMAN
	Guinn	Elizabeth	S	91-NE-245		BARKER
	Jabbari	F.		91-NM-329		JACOBS
	Lamore	Lawrence	L	91-NM-321		GLASSMAN
	Lee	Yuan	T	91-NC-271		BERMAN
	Luhmann, Jr.	Neville	C	91-NE-240	A	BARKER
	Lynch	Gary		91-NL-135		HADDAD
	Mukherjee	A.	K	91-NC-251	A	ROSENSTEIN
	Narens	Louis		91-NL-141		FREGLY
	Pearl	Judea		91-NM-376		WAKSMAN
	Wears	John	H	91-NC-255		BURGGRAB
	Williams	Norman		91-NA-274		TISHKOFF
	Zhong	Xiaolin	A	91-NA-221	A	SAKELL
Univ of California, San Diego	Carneville	George		91-NA-259		MCMICHAEL
	Dynes	Robert	C	91-NE-213	A	WEINSTOCK
Univ of Central Florida	Rinalducci	Savard	J	91-NL-126		HADDAD
Univ of Chicago	Outler	Laurie	J	91-NC-269		BERMAN

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INSTITUTION	LAST NAME	FIRST NAME	MIDDLE	PROPOSAL	STATUS	PM NAME
Univ of Cincinnati	Sibener	Steven	J	91-NC-270		BERMAN
	Elder	Richard	C	91-NC-267	A	BURGGRAF
	Jayaraman	N		91-NC-232		WILKES
Univ of Colorado	Pubin	Stanley	G	91-NA-219		BOYCE
	Feuerstein	Robert		91-NA-251		SAKELL
	Mahalingam	Shankar		91-NE-247		POMRENKE
	Pobovic	Zoya	B	91-NA-263		BIRKAN
	Schnabel	Robert	B	91-NE-225	A	WITT
Univ of Colorado at Denver	Damarauer	Robert		91-NM-335		GLASSMAN
	Hall	I.	W	91-NC-246		ERSTFELD
	Bartlett	Podney	J	91-NC-276	D	BURGGRAF
				91-NC-231		BURGGRAF
Univ of Delaware				91-NE-235	A	KELLEY
				91-NE-236		KELLEY
				91-NC-273		LEE
Univ of Florida				91-NC-216		ERSTFELD
				91-NC-380		NACHMAN
				91-NA-273		WU
Univ of Houston				91-NA-241	A	JONES
				91-NA-277		JONES
				91-NC-264		BERMAN
Univ of Illinois				91-NC-215		BURGGRAF
				91-NC-224		ERSTFELD
				91-ML-140		FREGLY
Univ of Kentucky				91-NE-203	A	WITT
				91-NI-035	A	BOLAND
				91-NM-368	D	NACHMAN
Univ of Maryland				91-NM-346		JACOBS
				91-NE-205	A	WEINSTOCK
				91-NM-327	A	JACOBS
Univ of Massachusetts				91-NM-350		NACHMAN
				91-NC-275		LEE
				91-NC-268		LEE
Univ of Michigan				91-NM-369	A	JACOBS
				91-NI-013	A	CAVENDER
				91-NE-259	A	BARKER
Univ of Minnesota				91-NA-227		BOYCE
				91-NM-339		JACOBS
				91-ML-134	A	FREGLY
Univ of Minnesota				91-NC-237		ERSTFELD
				91-NM-305		NACHMAN
				91-NA-266		WU
Univ of Minnesota				91-NM-359		JACOBS
				91-NM-364		NACHMAN
				91-NM-313		NACHMAN
Univ of Minnesota, Citta				91-NE-241	A	WEINSTOCK
				91-NM-360		SJOGREN
				91-NC-236	A	ERSTFELD

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INSTITUTION	INVESTIGATOR	FIRST NAME	MIDDLE	PROPOSAL	STATUS	PM NAME
Univ of New Mexico	White	Don		91-NL-142		STOBIE
	Schamiloğlu	Edi		91-NE-251	A	BARKER
	Sinha			91-NM-326		NACHMAN
Univ of North Carolina	Fishman	George	S	91-NM-375		SJOGREN
Univ of Notre Dame	Nelson	Robert	C	91-NA-215	A	FANT
Univ of Oklahoma	Watson	Deborah	K	91-NE-255		KELLEY
Univ of Oregon	Beck	Jacob		91-NL-129		TANGNEY
Univ of Pennsylvania	Cooperman	Barry	S	91-NM-336	A	HOLLAND
	Hjshin	Zvi		91-NA-211		BOYCE
Univ of Pittsburgh	Asher	Sanford	A	91-NC-243		ERSTFELD
	Hall	Charles	A	91-NM-341		NACHMAN
	Yates	John	T	91-NC-221		BURGGRAF
	Ghonam	H		91-NA-212		BOYCE
Univ of Rhode Island	Hall	Dennis	G	91-NE-209		POMRENKE
Univ of Rochester	Kyber, Jr	Henry	E	91-NM-382		WAKSMAN
Univ of South Florida	Gilbert	Richard	A	91-NI-033	A	BOLAND
	Snocki	Thomas		91-NL-147		FREGLY
	Stark	Louise		91-NM-307	A	WAKSMAN
Univ of Tennessee	Alexeff	Igor		91-NE-233		BARKER
	Mamantov	Gleb		91-NE-249		BARKER
	Gavler	Gary	S	91-NC-265	A	WILKES
Univ of Texas	Apostathis	Aristotle		91-NL-125	A	CERVENY
	Barnes	J. Wesley		91-NM-325	A	JACOBS
	Cook	Daniel	E	91-NM-312		GLASSMAN
	Piquott	M R		91-NM-333		HOLLAND
Univ of Toronto	Harris	Frank	E	91-NA-234		BOYCE
Univ of Utah	Johnston	William		91-NE-229		BARKER
Univ of Vermont	Quahston	Kurt	E	91-NL-133		FREGLY
Univ of Virginia	Horan	Cornelius	O	91-NM-355	A	NACHMAN
	Meyir	D	G	91-NM-353		NACHMAN
	Shur	Michael		91-NM-315		JACOBS
	Towe	Elias		91-NE-227		POMRENKE
Univ of Washington	Hernandez	Gonzalo		91-NE-226		POMRENKE
	Ly	Uy-Loi		91-NL-150		STOBIE
Univ of Wisconsin	Cnapman	Thomas	W	91-NM-365	A	JACOBS
	Dyer	Charles	R	91-NI-009		CAVENDER
	Lin	Cnun	C	91-NM-319		WAKSMAN
	Plesha	Michael	E	91-NE-260		KELLEY
University of Idaho	Rosendern	Richard		91-NA-216		BOYCE
University of Kansas	Taylor	Patrick	P	91-NC-227		ERSTFELD
Utah State University	Prescott	Glenn	E	91-NC-249		BURGGRAF
Vanderbilt University	Adams	Gene	M	91-NM-381		SJOGREN
Virginia Commonwealth University	Kawahiko	Kazuhiko		91-NL-138		STOBIE
Virginia Polytechnic Inst & State Univ	DeLorenzo	Robert	J	91-NI-005	A	CAVENDER
	Burns	John	A	91-NL-123	A	CERVENY
	Wayfeh	Ali	A	91-NM-356	A	JACOBS
	Wilson	Livne	H	91-NA-249	A	WU
			T	91-NM-332		JACOBS

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Warner Robins Air Logistics Center	Reitter	Daniel	C	91-NM-338	A	JACOBS
Washington State University	Dickinson	J Thomas		91-NA-230		WU
	Whitney	Paul		91-NA-278		WU
Washington University	Wickerhauser	M. Victor		91-NL-148		FREGLY
Wayne State University	Ibrahim	Raouf	A	91-NM-329	A	SJOGREN
	Levis	Robert	J	91-NA-245		WU
Wells Research Corp	Reiter	Elmar	R	91-MC-218		BURGGRAF
West Virginia University	Napolitano	Marcello	R	91-NL-136		STOBLE
	Teaksoory	Stuart	K	91-NA-217		WU
Western Michigan University	Alavi	Yousef		91-NE-237		WITT
Worcester Polytechnic Institute	Klein	Michael	W	91-NM-357		GLASSMAN
Wright State University	Keo	Nicholas	V	91-NI-037	A	BOLAND
	Voss	Daniel	T	91-NL-124	A	CERVENY
Y. Y. Yu Associates	Yu	Y	Y	91-NM-374		SJOGREN
Yale University	Bennot	William		91-NA-275		WU
	Mojishess	Eric		91-NE-228		SCHLOSSBER
	Moody	John		91-NM-363		SUDDARTH
	Smooke	Mitchell	D	91-NM-343		SUDDARTH
				91-NM-379		JACOBS

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SURFACE DAMAGE PHENOMENA AND THEIR EFFECT ON THE MECHANICAL BEHAVIOR OF ROCK JOINTS Univ of Wisconsin	Plesha Michael	N 36 11/07/91 \$363,200	BOYCE 91-NA-216	
DYNAMICS CONTROL AND MANEUVERING OF LARGE FLEXIBLE SPACE TETHERED REFLECTORS, TELEROBOTS AND EXPERIMENTAL MODELS (M3CU) Howard University	Spinum Peter	R 36 15/07/91 \$395,705	A WU 91-NA-220	\$125,916 01/01/92 \$395,705
FRACTURE MECHANICS OF FUNCTIONALLY GRADIENT MATERIALS Lehigh University	Endogon Fazil	N 36 15/07/91 \$335,129	BOYCE 91-NA-224	
INTERFACE MECHANICS OF PARTICULATE MEDIA WITH FIBERED INCLUSIONS Univ of Michigan	Myer Roman	N 12 23/07/91 \$97,795	BOYCE 91-NA-227	
AEROELASTIC TURBULENCE AND HIGH-DIMENSIONAL CHAOS Duke University	Virgin Lawrence	N 36 30/07/91 \$233,962	WU 91-NA-233	
MESOSTRUCTURES AND MESOMECHANICS IN AEROSPACE ADVANCED Univ of Toronto	Piggott M R	N 35 31/07/91 \$325,000	BOYCE 91-NA-234	
ON THE WALL JET IN STREAMING FLOW Univ of Arizona	Wygnanski Israel	R 12 05/08/91 \$106,784	A MCMICHAEL 91-NA-235	\$106,784 01/01/92 \$106,784
A SIMPLE AND RELIABLE ALGEBRAIC TURBULENCE MODEL BASED ON A MODIFIED MIXING-LENGTH CONCEPT Univ of Akron	Leonard P P	N 24 06/08/91 \$117,503	MCMICHAEL 91-NA-236	
INTERGOVERNMENTAL PERSONNEL ACT (IPA) Univ of Illinois	Botzko John	N 12 15/08/91 \$23,083	A JONES 91-NA-241	\$7,637 08/09/91 \$30,549

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DIRECT NUMERICAL SIMULATION OF ACOUSTIC-FLOW INTERACTION IN SOLID ROCKET MOTORS Univ of Colorado	Manalindan Shankar	N 24 11/09/91 \$60,000	BIRKAN 91-NA-263	
CAASERT) INTERFACE MICROSTRUCTURE MODIFICATION BY GAP GRADING AND MICROWAVE CURING Univ of Michigan	Li Victor C	N 36 13/09/91 \$308,250	WU 91-NA-266	
AFOSR WORKSHOP ON SUPERMANEUVERABILITY Lehigh University	Rockwell Donald	N 09 19/09/91 \$5,200	A FANT 91-NA-269	\$5,200 01/11/91 \$5,200
THE EFFECT OF A FLEXIBLE FIBER COVER ON CONTROLLING BOUNDARY LAYER FLOW AND HEAT TRANSFER Duke University	Sejan Adrian	N 36 20/09/91 \$61,000	A FANT 91-NA-270	\$11,000 01/02/92 \$61,000
DYNAMIC ANALYSIS OF TOPOLOGICAL CHANGES IN MECHANICAL SYSTEMS WITH INTERMITTENT MODES OF OPERATION Univ of Illinois	Airpouche Farid	N 36 23/09/91 \$256,589	WU 91-NA-273	
EVOLUTION AND INSTABILITIES OF A CRACK WITH A PROCESS ZONE. EXPERIMENTAL AND THEORETICAL STUDIES Univ of Illinois	Chudnovsky A	N 24 25/09/91 \$351,755	JONES 91-NA-277	
COMPUTER SUPPORT FOR PAY COSNER, MCAIR Air Force Weapons Lab	Mages Mary Ann	N 12 11/09/91 \$10,000	A SAKELL 91-NA-264	\$16,444 01/10/91 \$16,444
COMPUTER SUPPORT FOR PAY COSNER MCAIR Air Force Weapons Lab	Mages Mary Ann	N 10 11/09/91 \$10,000	A SAKELL 91-NA-265	\$10,000 01/10/91 \$10,000
WORKSHOP ON MULTIPLE SITE DAMAGE IN AGING AIRCRAFT Warner Robins Air Logistics Center	Reister Daniel	N 04 26/07/91 \$20,000	A WU 91-NA-230	\$20,000 10/08/91 \$20,000

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DEVELOPMENT & APPLICATION OF NEW ALGORITHMS FOR THE SIMULATION OF VISCIOUS COMPRESSIBLE FLOWS WITH MOVING BODIES IN THREE DIMENSIONS George Washington University	Lerner Rainald	R 36 26/07/91 \$372,269	A SAKELL 91-NA-229	\$118,748 01/11/91 \$372,269
REACTION RATE ENGINEERING MODELS FOR FATIGUE CRACK GROWTH Kozin, Bordenoff & Associates Inc	Bordenoff John	N 24 29/08/91 \$142,245	WU 91-NA-257	
STOCHASTIC LINEARIZATION AND NONLINEARIZATIONS: REVISITED AND IMPROVED Florida Atlantic University	Ellenokoff I	N 36 15/07/91 \$192,893	WU 91-NA-223	
(ANSEPT) FRACTO-EMISSION FROM METAL-CERAMIC INTERFACES Washington State University	Pickinson J Thomas	N 12 23/09/91 \$170,031	WU 91-NA-278	
SURFACE BOUNDARY CONDITIONS AND RELATED TECHNICAL ISSUES CONCERNING BURNETT EQUATIONS FOR TWO-DIMENSIONAL HYPERSONIC FLOW Univ of California	Linong Xiaolin	N 24 15/07/91 \$62,759	A SAKELL 91-NA-221	\$23,132 01/11/91 \$62,759
THEORIES OF TURBULENT COMBUSTION IN HIGH SPEED FLOWS Univ of California	Williams Forman	N 36 23/09/91 \$405,806	TISHKOFF 91-NA-274	
STABILITY OF CIRCULAR VORTICES Univ of California, San Diego	Carnevali George	N 24 03/09/91 \$250,494	MCMICHAEL 91-NA-259	
THERMO-MECHANICAL ENVIRONMENTAL DAMAGE IN THE FIBER REINFORCED 3231/SIGMA 1240 FIBERED METAL MATRIX COMPOSITE Univ of Rhode Island	Lerner H	N 36 03/07/91 \$362,502	BOYCE 91-NA-212	
DAMAGE EVOLUTION AND FAILURE OF CERAMIC MATRIX COMPOSITES UNDER THERMOMECHANICAL LOADS Georgia Tech Research Corporation	Talreja Ramesh	N 36 07/03/91 \$312,954	JONES 91-NA-237	

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THEORETICAL AND NUMERICAL STUDY OF ASYMMETRIC UNSTEADY LEX AND SLENDER WING VORTICES INCLUDING BREAKDOWN. Univ of Notre Dame	Nelson Robert	N 36 11/07/91 \$190,450	A FANT 91-NA-215	\$44,484 01/11/91 \$180,450
MICROMECHANICAL STUDY OF THE MACROSCOPIC VISCOPLASTICITY UNDER CYCLIC LOADING AND NON-ISOTHERMAL CONDITIONS Rutgers, The State Univ, Coll of Enginr	George	N 24 30/07/91 \$137,542	WU 91-NA-231	
CAASEFT) NUMERICAL SIMULATION OF THREE DIMENSIONAL SHOCK WAVE - TURBULENT BOUNDARY LAYER Rutgers, The State Univ, Coll of Enginr	Doyle	N 12 23/09/91 \$15,619	SAKELL 91-NA-271	
ANALYSIS OF CONTACT PROBLEMS WITH CONSIDERATION OF SHAPE, FRICTION, SURFACE CONDITIONS AND TOLERANCES Pennsylvania State University	Ashok	N 36 30/07/91 \$448,353	WU 91-NA-232	\$115,000 15/01/92 \$355,500
DETAILED STUDIES OF SOOT FORMATION IN LAMINAR DISCUSSION FLAMES FOR APPLICATION TO MODELING STUDIES Pennsylvania State University	Robert	N 36 26/08/91 \$355,500	A TISHKOFF 91-NA-246	
CAASEFT) EXPERIMENTAL RESEARCH ON CROSSING SHOCK-WAVE/BOUNDARY- LAYER INTERACTIONS Pennsylvania State University	Gary	N 24 29/08/91 \$271,177	SAKELL 91-NA-256	
NOVEL DYNAMICS AND CONTROL ANALYSIS METHODS FOR NONLINEAR STRUCTURAL SYSTEMS Texas A and M Research Foundation	John	N 24 29/08/91 \$203,022	WU 91-NA-254	
REVISIT INHOMOGENEITY PROBLEM VIA MODULUS PERTURBATION AND USE OF THE INVERSE METHOD OF MICROMECHANICS Northwestern University	Toshio Mur	N 36 03/07/91 \$258,917	BOYCE 91-NA-213	\$75,307 01/01/92 \$75,307
SIMULATION IN THE ULTRASONIC SUBMISSION TEST FOR LAYERED ANISOTROPIC PLATES Northwestern University	Leon	N 12 29/08/91 \$75,307	A JONES 91-NA-252	

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STABILITY AND DYNAMIC RESPONSE OF STRUCTURES SUBJECTED TO ROTATION INDUCED COMPRESSION Oregon State University	Alan Merrifield	N 24 28/08/91 \$173,429	WU 91-NA-253	
MULTIPLE SCALE METHODS FOR STABILITY ANALYSIS OF FLUID-STRUCTURE SYSTEMS Northwestern University	Liu Wing	N 36 24/09/91 \$293,274	WU 91-NA-276	
NONLINEAR AND CHAOTIC VIBRATIONS OF SANDWICH AND LAMINATED COMPOSITE BEAMS, PLATES AND SHELLS Y. Y. Yu Associates	Yu Y	N 36 23/09/91 \$122,660	WU 91-NA-275	\$98,350 01/12/91 \$293,325
STABILITY AND TRANSITION OF HIGH-SPEED FLOWS OVER REALISTIC GEOMETRIES Ohio State Univ Research Foundation	Harbert Thorwald	N 36 07/08/91 \$293,325	A SAKELL 91-NA-238	
EXPERIMENTAL MICROMECHANICS OF COMPOSITES Univ of Cincinnati	Jayaraman N	N 36 15/07/91 \$86,878	BOYCE 91-NA-219	
SHOCK-BOUNDARY LAYER AND UNSTABILITY VISCOUS FLOW INTERACTIONS Univ of Cincinnati	Rubin Stanley	N 36 26/08/91 \$191,025	SAKELL 91-NA-251	
STUDY OF A NAVIER-STOKES COMPUTER Princeton University	Losenchuck Daniel	R 36 25/08/91 \$466,630	A SAKELL 91-NA-247	\$70,000 01/12/91 \$539,076
(AASTRT) MICROMECHANICS OF HETEROGENEOUS BRITTLE COMPOSITES Princeton University	Ju Jiann-men	N 24 23/08/91 \$110,519	WU 91-NA-255	
STUDIES ON HIGH-PRESSURE AND UNSTEADY FLAME PHENOMENA Princeton University	Liu Chung-Kin	N 36 15/09/91 \$375,000	A TISHKOFF 91-NA-268	\$120,000 01/03/92 \$375,000

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(CAASERT) SUPERSONIC AND HYPERSONIC TURBULENT SHEAR LAYER STUDIES Princeton University	Smiths Alexander	N 36 30/09/91 \$273,645	SAKELL 91-NA-279	
THE EFFECT OF MICROCRACKS AND IMPERFECT INTERFACE ON THE THERMOELASTIC RESPONSE AND FAILURE OF COMPOSITES Univ of Pennsylvania	Hashin Zvi	N 36 03/07/91 \$499,063	BOYCE 91-NA-211	
THE EFFECT OF NONLINEARITIES ON FLEXIBLE COMPOSITE STRUCTURES Virginia Polytechnic Inst & State Univ	Mayfeh Ali	N 36 26/08/91 \$267,856	A WU 91-NA-248	\$78,000 15/02/92 \$244,519
(CAASERT) MAXIMIZING VTOL & POST-STAGE FOR US VICTORIAN AIRCRAFT Technion-Israel Inst of Technology	Gol-ur Benjamin	N 36 30/08/91 \$150,000	FANT 91-NA-258	
NASA AMES COMPUTER GRAPHICS SUPPORT FOR PARVIZ MOIN NASA - Ames Research Center	Loggillo Bob	N 09 09/08/91 \$15,000	A SAKELL 91-NA-239	\$15,000 01/01/92 \$15,000
STOCHASTIC MODAL MULTIFURCATION IN NONLINEAR STRUCTURES WITH INTERNAL RESONANCE Wayne State University	Iranian Raouf	N 36 26/08/91 \$274,683	WU 91-NA-245	
EXPERIMENTAL AND ANALYTICAL MECHANICAL BEHAVIOR OF MOLLUSK SHELLS Case Western Reserve University	Heuer A	N 35 04/09/91 \$256,494	JONES 91-NA-260	
PROPULSION RESEARCH ON THE HYBRID PLUMET PLASMA ROCKET Massachusetts Institute of Technology	Chen-Yi-Lin F	R 12 26/03/91 \$120,000	A JIRMAN 91-NA-249	\$120,000 01/02/92 \$120,000
3D ANALYSIS AND VERIFICATION OF FRACTURE GROWTH MECHANISMS IN FIBER-REINFORCED CERAMIC COMPOSITES Massachusetts Institute of Technology	Chenry Michael	R 09 23/09/91 \$43,911	JONES 91-NA-272	

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EXPERIMENTAL STUDY OF SHOCK-WAVE INTERACTION IN A SUPERSONIC STREAM Polytechnic Institute of New York	Kulkarni Iraji	N 36 17/07/91 \$396,545	SAKELL 91-NA-226	
INTERACTION OF TURBULENCE WITH COMPLEX SHOCK WAVES Stanford University	Moin Parviz	P 36 11/07/91 \$413,095	A SAKELL 91-NA-214	996,941 01/01/92 \$294,533
MICROMECHANICS EVALUATION OF FAILURE CRITERIA IN COMPOSITES DESIGN Stanford University	Tsai Stephen	N 60 15/07/91 \$679,365	BOYCE 91-NA-218	
TURBULENT BLOT GENERATION AND GROWTH RATES IN A COMPRESSIBLE BOUNDARY LAYER Syracuse University	Ligratt John	N 26 17/07/91 \$235,663	A FANT 91-NA-225	964,975 15/10/91 \$235,663
LARGE BODY SIMULATION OF HEAT TRANSFER ON TURBINE BLADES Stanford University	Fenniger Joel	N 24 15/09/91 \$327,365	FANT 91-NA-267	
SUPPORT FOR THE COMBUSTION INSTITUTE Combustion Institute	Calcote H.	R 12 19/08/91 \$10,000	SIRKAN 91-NA-243	
NONLINEAR DYNAMICS OF PRESSURE OSCILLATIONS WITH STOCHASTIC SOURCES IN COMBUSTION CHAMBERS California Institute of Technology	Culick F	N 12 19/08/91 \$133,597	BIRKAN 91-NA-244	
RESEARCH ON ELECTROSTATIC PROPULSION USING C60 MOLECULES California Institute of Technology	Culick Fev	N 36 09/09/91 \$324,300	BIRKAN 91-NA-262	
DEVELOPMENT OF GUIDELINES FOR THE APPLICATION OF A NEURAL DISCRETE STATE ESTIMATION IN THE ACTIVE CONTROL OF STRUCTURAL VIBRATIONS West Virginia University	Marcello Vapolitano	N 36 15/07/91 \$240,597	WU 91-NA-217	

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Cornell University

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Chung-Yuen

INVESTIGATOR

STRUCTURE AND CONTACT OF THE WALL REGION IN A TURBULENT BOUNDARY
LAYER

Cornell University

Lumley

J

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N 24 26/08/91 \$199,934	JONES 91-NA-250	
R 36 05/09/91 \$1,105,588	MCMICHAEL 91-NA-261	

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CHEMISTRY INVOLVING THE PREPARATION, ISOLATION, AND IMMOBILIZATION OF III-V COMPOUND SEMICONDUCTOR NANOCRYSTALS AND QUANTUM DOTS Univ of Illinois	Wells Richard	N 12 08/07/91 \$210,440	ERSTFELD 91-MC-205	
TRIBOLOGY OF MOLECULARLY-THIN PERFLUORETHETHER FILMS Univ of Illinois	Granick Steve	N 12 15/07/91 \$150,048	BURGGRAF 91-MC-215	
INVESTIGATION OF SEMICONDUCTOR-GLASS COMPOSITES FOR NON-LINEAR, GUIDED-WAVE OPTICAL APPLICATIONS Univ of Florida	Simmons Joseph	N 12 15/07/91 \$132,340	ERSTFELD 91-MC-216	
THE NUCLEATION OF CRYSTALLINE FILMS FROM VAPOR PHASE REACTANTS Brown University	Sheldon Brian	N 12 19/07/91 \$50,000	ERSTFELD 91-MC-223	
FLUIDS INCLUDING LUBRICANTS UNDER EXTREME CONDITIONS OF HIGH PRESSURE, HIGH TEMPERATURE AND CONFINEMENT Univ of Illinois	Jones Jiri	N 12 22/07/91 \$161,408	ERSTFELD 91-MC-224	
SELECTIVE AREA SYNCHROTRON RADIATION INDUCED DEPOSITION OF CARBON ON SILICON Univ of Wisconsin	Rosenberg Richard	N 12 22/07/91 \$140,100	ERSTFELD 91-MC-227	
1992 SAMUEL SYMPOSIUM Univ of Florida	Bartlett Rodney	N 12 25/07/91 \$10,000	BURGGRAF 91-MC-231	
ELECTRODEPOSITED NANOSCALE OPTICAL MATERIALS Univ of Missouri	Switzer Jay	N 12 29/07/91 \$166,100	A ERSTFELD 91-MC-236	
TAILORED INORGANIC AND ORGANOMETALLIC POLYMERS Univ of Michigan	Laine Richard	N 12 29/07/91 \$170,771	ERSTFELD 91-MC-237	

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SINGLE CRYSTAL FILMS AND WAVELONGS OF ORGANIC MATERIALS: PREPARATION AND NON-LINEAR OPTICAL PROPERTIES Auburn University	Thakur Prinal	N 12 19/08/91 \$69,092	LEE 91-NC-252	
KINETICS OF ELEMENTARY REACTIONS: THE EFFECTS OF ROTATIONAL ENERGY ON MOLECULAR REACTIONS Univ of Illinois	Gordon Robert	N 12 04/09/91 \$143,866	BERMAN 91-NC-264	
ELECTROCHEMICAL AND SPECTROSCOPIC STUDIES OF MOLTEN HALIDES Univ of Tennessee	Mamantov Gleb	P 12 05/09/91 \$135,329	A WILKES 91-NC-265	\$135,329 15/11/91 \$135,329
DYNAMICS OF GAS-SURFACE INTERACTIONS Univ of Chicago	Sibener Steven	R 11 12/09/91 \$130,024	A BURGGRAF 91-NC-267	\$130,024 01/12/91 \$130,024
BOND SELECTIVE CHEMISTRY BEYOND THE ADIABATIC APPROXIMATION Univ of Chicago	Butler Laurie	N 12 16/09/91 \$251,998	BERMAN 91-NC-269	
RESEARCH TRAINING IN ENERGETIC MATERIALS' BOND SELECTIVE CHEMISTRY Univ of Chicago	Butler Laurie	N 12 16/09/91 \$80,416	BERMAN 91-NC-270	
ADVANCED NONLINEAR POLYMERIC OPTICAL WAVEGUIDES AND DEVICES Univ of Florida	Ramaswamy R.	N 12 20/09/91 \$151,845	LEE 91-NC-273	
HIGH STRAIN-RATE PROPERTIES OF CERAMIC MATRIX COMPOSITES Univ of Delaware	Hall I.	N 12 27/09/91 \$127,090	D BURGGRAF 91-NC-276	
POLYMER SCIENCE AND ENGINEERING: THE SHIPING RESEARCH FRONTIER National Research Council	Raber Douglas	N 12 23/08/91 \$25,000	LEE 91-NC-258	

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GAS PHASE IMPROVED LASER STUDIES Physical Sciences Inc	Javis Steven	N 12 26/08/91 \$56,000	GERMAN 91-NC-259	
HIGH TEMPERATURE CHEMISTRY OF BORON OXIDE ANTIOXIDANTS FOR C/C COMPOSITES: CHEMICAL KINETIC MODELING WITH GRADIENT SENSIT. ANALY Aerodyne Research Inc	Brown R.	N 12 23/08/91 \$150,088	BURGGRAF 91-NC-262	
AN INVESTIGATION OF THE KINETICS, BONDING AND OXIDATION PROTECTION PROPERTIES OF BORATE GLASSES ON CARBON SURFACES General Electric Co	McKee Douglas	N 12 03/08/91 \$105,447	BURGGRAF 91-NC-247	
PHOTODISSOCIATION DYNAMICS OF CLUSTER IONS Univ of California	Bowers Michael	N 12 10/07/91 \$153,496	A BERMAN 91-NC-210	\$153,496 15/11/91 \$153,496
FUNDAMENTAL INVESTIGATIONS OF CREEP AND FATIGUE IN DISPERSION STRENGTHENED ALUMINUM ALLOY Univ of California	Mukherjee A.	N 12 16/08/91 \$176,000	A ROSENSTEIN 91-NC-251	\$176,000 01/02/92 \$543,000
3D INITIO MOLECULAR DYNAMICS SIMULATIONS OF STRATEGIES LEADING TO ENHANCED OXIDATION RESISTANCE OF CARBON-CARBON COMPOSITES Univ of California	Weare John	N 12 22/08/91 \$231,599	BURGGRAF 91-NC-256	
ATM INTERNATIONAL SYMPOSIUM ON MOLECULAR BEAMS Univ of California	Lee Yuan	N 12 18/09/91 \$11,245	BERMAN 91-NC-271	
SPECIALIST MEETING ON MICROWAVE RADIOMETRY AND REMOTE SENSING APPLICATIONS National Oceanic and Atmospheric Admin	Westwater Ed	N 12 11/07/91 \$5,000	STOBIE 91-NC-211	
GAS PHASE STUDIES OF BORON, SILICON, AND ALUMINUM- RELATIONSHIPS TO OXIDATION IN CARBON-CARBON COMPOSITES Univ of Colorado at Denver	Samrauer Robert	N 12 26/08/91 \$205,675	ERSTFELD 91-NC-246	

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POLYMER PRECURSOR ROUTES TO NANOSCALE CERAMIC COMPOSITES Konselzer Polytechnic Institute	Interrante Leonard	N 12 15/07/91 \$116,344	ERSTFELD 91-NC-217	
SECOND INTERNATIONAL SYMPOSIUM ON ELECTROCHEMICAL IMPEDANCE SPECTROSCOPY Pennsylvania State University	Macdonald Dithy	N 12 23/07/91 \$5,000	WILKES 91-NC-234	
SOLUBLE BORON-ORGANIC POLYMERS: DESIGNED MOLECULAR ROUTE TO OXIDATIVELY RESISTANT BORON-CARBONS Pennsylvania State University	Chung T.	N 12 21/08/91 \$143,188	BURGGRAF 91-NC-253	
ISOTHERMAL OXIDE-OXIDE-WATER PHASE DIAGRAMS: A NOVEL DETERMINATION METHOD Pennsylvania State University	Grutzeck Michael	N 12 22/08/91 \$129,235	ERSTFELD 91-NC-257	
EXTENDED LIFE OXIDATION PROTECTION FOR CARBON/CARBON COMPOSITES THROUGH INHIBITION OF INTERNAL OXIDATION Ohio State Univ Research Foundation	Rapp Robert	N 12 08/07/91 \$216,784	BURGGRAF 91-NC-206	
A NEW APPROACH TO MOLECULAR COMPOSITES Univ of Massachusetts	Stein Richard	N 12 16/09/91 \$60,000	LEE 91-NC-268	
SYNTHESIS AND PROPERTIES OF COMPLEX POLYARYLENE VINYLENES Univ of Massachusetts	Karasz Frank	N 12 25/09/91 \$108,642	LEE 91-NC-275	
SURFACE CHEMISTRY OF DIAMOND SINGLE CRYSTALS Univ of Pittsburgh	Vates John	N 12 17/07/91 \$181,562	BURGGRAF 91-NC-221	
NOVEL MATERIALS AND DEVICES FROM SELF-ASSEMBLED PERIODIC STRUCTURES Univ of Pittsburgh	Asher Sanford	N 12 01/08/91 \$180,537	ERSTFELD 91-NC-243	

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SYMPOSIUM ON BETTER CERAMICS THROUGH CHEMISTRY V Materials Research Society	Jallande John	N 12 13/07/91 \$25,234	ERSTFELD 91-NC-214	
1992 HRS SPRING MEETING "NOVEL FORMS OF CARBON" Materials Research Society	Renschler C.	N 12 26/09/91 \$2,000	BURGGRAF 91-NC-260	
NON-TRANSFERABLE ARC PLASMA SYNTHESIS OF NANOMETER CERAMIC PARTICLES: APPLICATIONS AND KINETICS OF NUCLEATION AND GROWTH University of Idaho	Taylor Patrick	N 12 15/08/91 \$159,695	BURGGRAF 91-NC-249	
X-RAY ABSORPTION SPECTROSCOPY OF ELECTROCHEMICALLY GENERATED SPECIES Univ of Cincinnati	Elder Richard	N 12 25/07/91 \$160,993	WILKES 91-NC-232	
POLYMER FILMS FOR SECOND ORDER NONLINEAR OPTICS Oklahoma State University	Ford Darren	N 12 24/07/91 \$81,321	LEE 91-NC-230	
ANIONICALLY-CONDUCTIVE ULTRATHIN FILM COMPOSITE MEMBRANES Colorado State University	Martin Charles	N 12 09/08/91 \$105,100	WILKES 91-NC-248	
STUDIES OF COMBUSTED MATERIALS FOR PHOTONIC DEVICE APPLICATIONS Michigan State University	Blanchard Gary	N 12 16/08/91 \$82,774	LEE 91-NC-250	
THEORETICAL INVESTIGATIONS OF THE DYNAMICS OF HIGH-ENERGY DENSITY MATERIALS UNDER MATRIX-ISOLATION CONDITIONS Oklahoma State University	Raff Lionel	N 12 09/09/91 \$70,448	BURGGRAF 91-NC-266	
THE EFFECT OF PHYSICAL AGING ON THE STRUCTURE OF POLYMER ELECTROLYTES AND THE TEMPORAL STABILITY OF SECOND HARMONIC GENERATION Carnegie-Mellon University	Patterson G.	N 12 28/07/91 \$96,500	LEE 91-NC-208	

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CHEMICAL PROCESSING OF NOVEL CERAMICS GLASSES AND COMPOSITES FOR MICROELECTRONIC PACKAGING Carnegie-Mellon University	Kunta Prashant	N 12 17/07/91 \$112,137	HEDBERG 91-MC-219	
STUDIES IN LEWIS ACID AND SUPERACID IONIC LIQUIDS State University of New York	Osteryoung Robert	N 07 26/08/91 \$36,491	A WILKES 91-MC-251	\$36,491 01/12/91 \$36,491
1992 BOSTON RESEARCH CONFERENCE ON CORROSION Corion Research Conference Inc	Macdonald Dicky	N 12 30/07/91 \$3,000	WILKES 91-MC-240	
EPITAXIAL GROWTH OF STRONGLY BOUND COVALENT SOLIDS Cyrus State University	Levis Robert	N 12 15/07/91 \$155,363	BURGGRAB 91-MC-218	
SYNTHESIS AND APPLICATION OF FUNCTIONAL CERAMIC COMPOSITES Case Western Reserve University	Jukanik Chaim	N 12 22/07/91 \$99,953	HEDBERG 91-MC-225	
PEROXO COMPLEXES OF CHROMIUM(IV). DIFUNCTIONAL HIGH ENERGY MATERIALS Kent State University	Gould Edwin	N 12 13/07/91 \$61,909	HEDBERG 91-MC-213	
DEVELOPMENT OF QUANTUM CHEMICAL METHODS AND THEIR APPLICATIONS TO SIGMA-CONJUGATED POLYMERS Georgetown University	Kertesz Milkos	N 12 02/08/91 \$43,990	BURGGRAB 91-MC-244	
NOVEL HANDBASE CHEMICAL STRUCTURE OBTAINED THROUGH INORGANIC SYNTHESIS Massachusetts Institute of Technology	Papadethymiou Georgia	N 12 17/07/91 \$117,913	ERSTFELD 91-MC-220	
SYNTHESIS, CHARACTERIZATION, AND INTERACTIONS OF WELL DEFINED CERAMIC POWDERS Clarkson University	Metijevic Egon	N 12 04/09/91 \$44,350	ERSTFELD 91-MC-263	

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STRUCTURE/PROPERTY RELATIONSHIPS FOR THIRD-ORDER ORGANIC NONLINEAR OPTICAL MATERIALS California Institute of Technology	Harder	N 12 17/07/91 \$156,505	LEE 91-NC-222	
STABILITY AND RADIATIONLESS DECAY AND ENERGY TRANSFER, THE ROLE OF ACTUAL AND AVOIDED SURFACE CROSSINGS Johns Hopkins University	Yarkov	N 12 24/09/91 \$29,248	SURGGRAF 91-NC-274	
INTERACTION BETWEEN MICROORGANISMS AND POLYMERS USED FOR LAYERING IN THE ELECTRONICS INDUSTRY Harvard University	Witnell	N 12 22/07/91 \$125,000	A WEDBERG 91-NC-226	\$125,000 01/02/92 \$392,012
VACUUM ULTRAVIOLET STUDIES OF MOLECULAR DYNAMICS Cornell University	Houston	N 12 19/09/91 \$124,234	A SERMAN 91-NC-272	\$124,234 01/01/92 \$257,672

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HIGH-FREQUENCY PROPERTIES OF TWO-DIMENSIONAL JOSEPHSON JUNCTION ARRAYS Univ of Maryland	Loop Christosner	N 36 02/07/91 \$230,000	A WEINSTOCK 91-NE-205	\$50,000 01/11/91 \$230,000
PURITY-RELATED OPTICAL TRANSMISSION FROM SILICON-CERAMIC ALLOYS AND SUPERLATTICES Univ of Rochester	Hall Dennis	N 36 12/07/91 \$434,709	POMRENKE 91-NE-208	
HIGH SPEED HETEROSTRUCTURE OPTICAL MATERIALS & DEVICES Univ of Illinois	Warkoc Harris	N 24 16/07/91 \$920,055	A WITT 91-NE-209	\$298,659 01/01/92 \$920,055
MICROSTRUCTURAL ASPECTS OF DEFORMATION AND FAILURE OF METAL-MATRIX COMPOSITES UNDER DYNAMIC LOADING 3M International	Shockey Donald	N 35 16/07/91 \$453,882	A ROSENSTEIN 91-NE-211	\$95,996 01/02/92 \$453,882
INTERACTION OF IRRADIATION WITH STM AND STM-LIKE TUNNEL JUNCTIONS: APPLICATION TO DEFECTS AND OPTICAL DETECTION Temple University	Sullivan Thomas	N 36 16/07/91 \$255,000	WEINSTOCK 91-NE-212	
MESFET GRID OSCILLATORS-INJECTION-LOCKING: POWER DESIGN AND MODULATION Univ of Colorado	Popovic Zoya	N 36 20/08/91 \$463,294	WITT 91-NE-225	
A STUDY OF INTRACRYSTALLINE DEFECT-LAYERS ON GaAs AND InP (CHIL) VICINAL SURFACES FOR USE IN DEVICE STRUCTURES Univ of Virginia	Tome Elias	N 24 20/08/91 \$219,834	POMRENKE 91-NE-226	
Monte Carlo Simulations of Electron and Hole Transport in Compound Semiconductor CIGS and InAs Univ of Virginia	Shur Michael	N 24 20/08/91 \$10,194	POMRENKE 91-NE-227	
A PROPOSAL FOR A STUDY OF LASER PHYSICS Yale University	Sennett William	N 24 20/08/91 \$335,828	SCHLOSSBER 91-NE-228	

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APPLICATION OF MASSIVELY PARALLEL COMPUTERS TO QUANTUM SCATTERING UNIV of Utah	Harris Frank	N 36 20/08/91 \$450,407	BARKER 91-NE-229	
RESEARCH IN SCANNING TUNNEL MICROSCOPY UNIV of Arizona	Savid	R 36 23/08/91 \$405,000	A SCHLOSSER 91-NE-232	\$110,000 01/01/92 \$410,000
(AAERT) A STUDY OF MICROWAVE FREQUENCY MODIFICATION UNIV of Tennessee	Alexeff Igor	N 12 26/08/91 \$171,621	BARKER 91-NE-233	
FINANCIAL SUPPORT OF 1992 JANTREL SYMPOSIA UNIV of Florida	Bartlett Rodney	N 08 26/08/91 \$5,000	KELLEY 91-NE-235	
MOLECULAR INTERACTIONS AND PROPERTIES WITH MANY-BODY METHODS UNIV of Florida	Bartlett Rodney	R 12 26/08/91 \$143,593	A KELLEY 91-NE-236	\$143,593 01/12/91 \$143,593
DEVELOP ELECTRICALLY PUMPED SODIUM DOPED SILICON LASERS UNIV of Colorado	Feuerstein Robert	N 36 11/09/91 \$225,000	POMRENKE 91-NE-247	
FREQUENCY MODIFICATION OF D.F. SIGNALS UNIV of Tennessee	Alexeff Igor	N 06 12/09/91 \$39,097	BARKER 91-NE-249	
(AAERT) SUPERCONDUCTORS AND NONLINEAR OPTICAL MATERIALS BASED ON MOLECULAR GUEST-HOST SYSTEMS Brown University	Lawandy Nabil	N 36 16/09/91 \$268,899	SCHLOSSER 91-NE-252	
OPTOELECTRONIC NEURAL NETWORK IMPLEMENTATION IBM Corporation	Haney Michael	R 24 16/09/91 \$300,263	CRAIG 91-NE-254	

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STUDY OF HIGHLY-CORRELATED SYSTEMS Univ of Oklahoma	Watson Deborah	N 36 17/09/91 \$528,655	KELLEY 91-NE-255	
THE SYNTHESIS OF MICROWAVE MAGNETIC MATERIALS AS ORIENTED SPUTTERED FILMS Queens College	Cadieu Fred	N 36 18/09/91 \$409,677	A WEINSTOCK 91-NE-257	\$132,765 01/01/92 \$408,678
HIGH POWER, ULTRA-LONG-PULSED GYROFFON BACKWARD WAVE OSCILLATORS Univ of Michigan	Gildenbach Ronald	N 24 23/09/91 \$221,397	A BARKER 91-NE-258	\$65,505 01/01/92 \$221,897
COLLISIONAL PROCESSES INVOLVING ATMOSPHERIC GASES Univ of Wisconsin	Lin Chun	N 36 24/09/91 \$752,302	KELLEY 91-NE-260	
THIN MAGNETIC FILMS Univ of Minnesota, ORITA	Dahlberg E	N 36 30/08/91 \$239,976	A WEINSTOCK 91-NE-241	\$84,974 15/01/92 \$239,976
RAMAN STUDY AND DEVICE APPLICATION OF LPEE GROWTH OF GAINASSB/GASO North Carolina A&T State University	Iyer Shanthi	N 36 02/07/91 \$419,174	POMRENKE 91-NE-204	
COMPACT MILLIMETER WAVE DEVICES: DIELECTRIC LOADED WIDE BAND GYRO-TWT, HIGH VOLTAGE CARM, NEGATIVE ENERGY CRM PENIOMAGNETRON Univ of California	Luhmann, Jr. Neville	P 12 30/08/91 \$100,000	A BARKER 91-NE-240	\$100,000 01/12/91 \$100,000
LINEAR PLASMON RESONANCES IN TUNABLE, QUASI-3D ELECTRON GASES Univ of California	Gwin Elizabeth	N 36 10/09/91 \$301,149	BARKER 91-NE-245	
BURNISH LIQUID HELIUM TO UNIVERSITY OF CALIFORNIA SAN DIEGO Univ of California, San Diego	Jynes Robert	N 36 14/07/91 \$30,000	A WEINSTOCK 91-NE-213	\$10,000 01/10/91 \$10,000

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FREE LASERS AND ELECTRO-OPTICS SOCIETY				
Inst. of Electrical & Electronics Engrs	Wentman	N 12 19/07/91 \$5,435	POMRENKE 91-NE-214	
FOURTH INTERNATIONAL CONFERENCE ON INDIUM PHOSPHIDE AND RELATED MATERIALS				
Inst. of Electrical & Electronics Engrs	Lorenzo	N 05 10/09/91 \$5,000	POMRENKE 91-NE-246	
14TH INTERNATIONAL CONFERENCE ON LASERS AND APPLICATIONS				
Society for Optical/Quantum Electronics	Corcoran	N 06 27/09/91 \$10,000	A SCHLOSSER 91-NE-263	\$10,000 01/12/91 \$10,000
SECOND INTERNATIONAL SYMPOSIUM ON ATOMIC LAYER EPITAXY				
North Carolina State University	Bedair	N 12 12/09/91 \$2,000	POMRENKE 91-NE-250	
INVESTIGATION OF GALLIUM EPITAXIAL LAYERS GROWN BY MOLECULAR BEAM EPITAXY AT LOW TEMPERATURE				
MIT -- Lincoln Lab	Calawa	N 36 19/08/91 \$574,677	WITT 91-NE-224	
PRECISE TIME AND TIME INTERVAL R&D STUDY				
Naval Research Laboratory	White	N 12 11/09/91 \$20,000	A KELLEY 91-NE-248	\$20,000 01/09/91 \$20,000
DEVELOPMENT OF PROCESS TECHNOLOGY FOR FABRICATION OF MESOSCOPIC DEVICES				
Johnson Graduate Center for Study & Resch	Sigmon	N 36 30/09/91 \$759,177	A WITT 91-NE-264	
THIN FILM ROUTES TO NEW MATERIALS				
Johnson State University	Sleight	N 36 11/07/91 \$265,000	A WEINSTOCK 91-NE-207	\$90,000 01/11/91 \$265,000
NOVEL OPTO-ELECTRONIC DEVICES BASED ON CHARGE STORAGE MECHANISM IN II-VI SEMICONDUCTOR ALLOYS				
Kansas State University	Jiang	N 36 19/08/91 \$224,714	POMRENKE 91-NE-223	

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LOW-RESISTANCE, HIGH-POWER-EFFICIENCY VERTICAL CAVITY MICROLASERS Photonics Research Inc.	Jewell Jack	N 36 23/09/91 \$842,000	CRAIG 91-NE-259	\$142,000 01/01/92 \$573,500
INVESTIGATION OF FRACTURE RESISTANCE IN MICROSTRUCTURES OF INTERMETALLIC MATERIALS FOR HIGH TEMPERATURE SERVICE Southwest Research Institute,	Davidson David	N 36 16/07/91 \$573,500	ROSENSTEIN 91-NE-210	\$142,000 01/01/92 \$573,500
COHERENT SOFT X-RAY GENERATION BY HARMONIC FREQUENCY CONVERSION IN A PERFORMED PLASMA Princeton University	Suckewer Szymon	N 36 16/09/91 \$860,328	SCHLOSSBER 91-NE-253	\$142,000 01/01/92 \$573,500
SUPERCONDUCTING HIGH TC THIN-FILM VORTEX-FLOW TRANSISTOR Parkview Works, Inc.	Hohenwarter Jert	N 24 03/09/91 \$499,757	WEINSTOCK 91-NE-242	\$187,409 02/01/92 \$499,757
PASOTRON TECHNOLOGY Hughes Aircraft Co	Sutler Jennifer	N 24 21/08/91 \$302,388	A BARKER 91-NE-231	\$120,000 01/01/92 \$302,888
JACKHARD-HAVE OSCILLATOR INVESTIGATIONS IN THE RAMAN REGIME Univ of New Mexico	Schamilloglu Edi	N 16/09/91 \$200,018	A BARKER 91-NE-251	\$200,018 01/01/92 \$200,018
INVESTIGATION OF NOVEL HYBRID SUPERCONDUCTORS-SEMICONDUCTOR HETEROSTRUCUTPE JUNCTION AND TRANSISTORS State University of New York	Gurvitch Michael	N 36 03/07/91 \$230,000	A WEINSTOCK 91-NE-206	\$50,000 15/10/91 \$230,000
ENHANCED QUANTUM DOT NONLINEAR OPTICAL MATERIALS Materials Technologies Corporation	Pike John	N 06 05/08/91 \$64,428	A CRAIG 91-NE-217	\$63,900 15/11/91 \$64,428
(ASERT) INVESTIGATION OF CHARGED PARTICLE DYNAMICS IN ELECTROMAGNETIC FIELDS Texas Tech University	Zieher Klaus	N 13 26/08/91 \$169,350	BARKER 91-NE-234	\$63,900 15/11/91 \$64,428

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ACROWAVE PROPAGATION AND ATTENUATION IN MAGNETOPLASMAS Massachusetts Institute of Technology	Lee	N 12 19/08/91 \$75,000	A BARKER 91-NE-221	\$75,000 01/12/91 \$75,000
(CAASERT) THEORETICAL AND COMPUTATIONAL INVESTIGATION OF THE DOUBLE STREAM CYCLOTRON WASER Massachusetts Institute of Technology	Dekefi	N 36 25/09/91 \$150,000	BARKER 91-NE-262	
2-D OPTICAL MEMORY DISK California Institute of Technology	Psaltis	N 36 17/09/91 \$339,900	CRAIG 91-NE-256	
MULTI-CHIP MODULES: DESIGN FOR MANUFACTURABILITY West Virginia University	Teeksbury	N 36 26/08/91 \$525,109	WITT 91-NE-237	
NOVEL METHODS OF ACCELERATION Cornell University	Nation	N 12 21/08/91 \$210,000	A BARKER 91-NE-230	\$210,000 01/02/92 \$210,000
(CAASERT) LONG RANGE PROXIMITY EFFECT IN THIN FILM SUPERCONDUCTORS Cornell University	Parpia	N 36 04/09/91 \$150,000	WEINSTOCK 91-NE-243	
INVESTIGATION OF THE PROPERTIES OF THIN FILM SUPERCONDUCTING STRUCTURES WITH MODIFIED TC'S Cornell University	Parpia	N 36 04/09/91 \$60,000	WEINSTOCK 91-NE-244	
INVESTIGATION OF GAAS EPITAXIAL LAYERS GROWN BY MOLECULAR BEAM EPI TAXY AT LOW TEMPERATURES Lincoln Laboratory/MIT	Calawa	N 36 05/08/91 \$574,677	A WITT 91-NE-218	\$194,900 01/10/91 \$574,676

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LOCAL PRECONDITIONING OF THE EULER EQUATIONS AND ITS NUMERICAL APPLICATIONS Univ of Michigan	Leer	N 36 01/07/91 \$320,016	NACHMAN 91-NM-305	\$59,184 01/12/91 \$231,480
DEVELOPMENT OF THE THEORY AND ALGORITHMS FOR SYNTHESIS OF REFLECTOR ANTENNA SYSTEMS tatis Inc	Oliker	R 36 01/07/91 \$235,316	A NACHMAN 91-NM-309	
THE FORMULATION & APPLICATION OF A TABU SEARCH FRAMEWORK TO PRODUCTION SCHEDULING PROBLEMS Univ of Texas	J. Wesley	N 24 12/07/91 \$161,784	GLASSMAN 91-NM-312	
NUMERICAL METHODS FOR LARGE EIGENVALUE PROBLEMS AND BIFURCATION ANALYSIS Univ of Minnesota	Sead	N 24 12/07/91 \$335,722	NACHMAN 91-NM-313	
THEORY FOR MULTI-RATE CONTROL SYSTEMS DESIGN BY CONVEX OPTIMIZATION Univ of Virginia	Meyer	N 36 12/07/91 \$197,898	JACOBS 91-NM-315	
SCALE-SPACE AND FEATURE-BASED ASPECT GRAPHS Univ of Wisconsin	Dyer	N 36 12/07/91 \$384,754	WAKSMAN 91-NM-319	
SIGNAL PROCESSING FOR TRANSIENT FEATURE EXTRACTION Agere, Inc.	Jagler	N 04 13/07/91 \$47,991	A SJOGREN 91-NM-320	\$47,991 15/09/91 \$47,991
ADAPTIVE CONTROL OF NONLINEAR AND STOCHASTIC SYSTEMS Univ of Texas	Arzopostathis	N 24 01/08/91 \$97,134	A JACOBS 91-NM-325	\$47,340 15/11/91 \$97,134
STOCHASTIC ADAPTIVE ESTIMATION AND CONTROL Univ of Maryland	Marcus	N 24 01/09/91 \$97,120	A JACOBS 91-NM-327	\$47,338 15/11/91 \$97,120

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THE FORMAL DEFINITION OF AN INHERENTLY UNAMBIGUOUS DESIGN METHODOLOGY Univ of Texas	Cooke Daniel	R 60 02/08/91 \$434,290	HOLLAND 91-NM-333	
VEHICLE ROUTING WITH STOCHASTIC DEMANDS Univ of Arizona	Dror Moshe	N 36 07/08/91 \$242,301	GLASSMAN 91-NM-334	
NEW METHODS FOR LARGE SCALE LOCAL AND GLOBAL OPTIMIZATION Univ of Colorado	Schnabel Robert	R 24 07/08/91 \$313,539	A GLASSMAN 91-NM-335	\$151,460 01/12/91 \$313,539
GEOMETRICAL AND TOPOLOGICAL ASPECTS OF TIME DOMAIN ANTENNA SYNTHESIS Boston University	Kotlyuga P. Robert	N 24 09/08/91 \$77,514	A NACHMAN 91-NM-337	\$37,759 01/12/91 \$77,514
ROBUST CONTROL AND IDENTIFICATION Univ of Michigan	Khargonekar Premod	N 36 13/08/91 \$195,485	JACOBS 91-NM-339	
NEW NEURAL ALGORITHMS FOR SELF-ORGANIZED LEARNING Yale University	Moody John	R 12 19/08/91 \$165,624	SUDDARTH 91-NM-343	
NONLINEAR FILTERING FOR OPTIMAL AIR-TO-AIR MISSILE GUIDANCE AND CONTROL Univ of Kentucky	Rishel R	N 36 20/08/91 \$393,752	JACOBS 91-NM-346	
THE MEASURE OF NONHYPERBOLICITY IN CHAOTIC DYNAMICAL SYSTEMS Univ of Maryland	Yorke James	N 36 22/08/91 \$92,850	NACHMAN 91-NM-350	
LARGE DEFORMATION FAILURE MECHANISMS IN NONLINEAR SOLIDS Univ of Virginia	Horgan Cornelius	N 36 26/08/91 \$110,682	A NACHMAN 91-NM-353	\$35,232 01/01/92 \$110,682

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THE ASYMPTOTIC THEORY OF THE REFLECTION & TRANSMISSION OF A PULSED ELECTROMAGNETIC BEAM FIELD AT A PLANAR INTERFACE SEPARAT. TWO DISP Univ of Vermont	Kurt Oughston	R 12 03/09/91 \$104,546	NACHMAN 91-NM-355	
OPTIMAL SCHEDULING, ROUTING, AND FLOW CONTROL FOR DATA NETWORKS Univ of Michigan	Demosthenis Tanaketzis	N 36 06/09/91 \$322,711	JACOBS 91-NM-358	
POPULATION SIZE ESTIMATION, WITH APPLICATION TO MIXTURES Univ of Missouri	Lee Bain	N 24 10/09/91 \$132,047	SJOGREN 91-NM-360	
MATHEMATICAL METHODS FOR THE IMPLEMENTATION OF NEURAL NETWORKS Yale University	Eric Wojciesz	N 36 17/09/91 \$505,252	SUDDARTH 91-NM-363	
ENVIRONMENTAL STUDIES: MATHEMATICAL, COMPUTATIONAL AND STATISTICAL ANALYSIS Univ of Minnesota	Avner Friedman	N 07 17/09/91 \$10,000	NACHMAN 91-NM-364	
CLOSED-FORM SOLUTIONS OF SOME NON-LINEAR PARTIAL DIFFERENTIAL EQUATIONS Univ of Illinois	Lee Rubel	N 36 17/09/91 \$201,459	D NACHMAN 91-NM-368	\$86,386 01/02/92 \$273,528
ROBUST FIXED-STRUCTURE CONTROL Univ of Michigan	Dennis Bernstein	N 32 17/09/91 \$273,528	A JACOBS 91-NM-369	
CAASERT) NUMERICAL METHODS AND APPROXIMATION AND MODELLING PROBLEMS ON STOCHASTIC CONTROL THEORY Aron University	Wendell Fleming	N 36 24/09/91 \$86,972	JACOBS 91-NM-378	
ADAPTIVE CONTINUATION ALGORITHMS WITH APPLICATION TO COMBUSTION PROBLEMS Yale University	Mitchell Smooke	N 36 24/09/91 \$245,514	JACOBS 91-NM-379	

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VORTEX CORE DYNAMICS, COMPLEX HELICAL WAVE DECOMPOSITION, ORGANIZ ATION OF FINE-SCALE TURBULENCE & OTHER RELATED THEORETICAL STUDIES Univ of Houston	Fussain	N 36 27/09/91 \$575,447	NACHMAN 91-NM-380	
REPRESENTING, V-RIFYING, AND UPDATING UNCERTAINTY	Kybert, Jr	N 36 20/09/91 \$408,476	WAKSMAN 91-NM-382	
Univ of Rochester	Henry			
RESEARCH IN IMPROVED ASSESSMENT OF SOFTWARE RELIABILITY	Singpurwalla	N 24 21/09/91 \$53,127	A SJOGREN 91-NM-369	\$25,758 01/11/91 \$53,127
Georgia Washington University	N			
STOCHASTIC NETWORK PROCESSES	Serfozo	N 12 21/07/91 \$50,367	A SJOGREN 91-NM-306	\$50,367 01/11/91 \$50,367
Georgia Institute of Tech	Richard			
CONNECTIONIST REASONING BY ANALOGY: CONNECTIONS AND SYMBOLS RECONCILED	Varnden	N 36 21/07/91 \$343,075	WAKSMAN 91-NM-308	
New Mexico State University	John			
PARTIAL SUPPORT FOR THE SECOND INTERNATIONAL SYMPOSIUM ON ARTIFICIAL INTELLIGENCE AND MATHEMATICS	Hoffman	N 06 12/07/91 \$14,963	A WAKSMAN 91-NM-317	\$14,963 05/01/92 \$14,963
Florida Atlantic University	Frederick			
SEVENTH INTERNATIONAL CONFERENCE ON GRAPH THEORY, COMBINATORICS, ALGORITHMS AND APPLICATIONS	Alawi	N 12 06/09/91 \$76,320	GLASSMAN 91-NM-357	
Western Michigan University	Yousef			
EXTERIOR METHODS FOR LINEAR PROGRAMMING VIA INCENTIVE	Chang	N 24 01/07/91 \$92,106	GLASSMAN 91-NM-304	
Univ of California	Tsu-Shuan			
ON THE SURVEY PROBLEM	Lawrence	N 24 13/07/91 \$151,511	GLASSMAN 91-NM-321	
Univ of California	Lawrence			

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ORDER-RECURSIVE METHODS FOR ADAPTIVE IDENTIFICATION OF FLEXIBLE STRUCTURES WITH APPLICATIONS FOR CONTROL Univ of California	Jabbari F.	N 24 02/08/91 \$108,040	JACOBS 91-NM-329	
CAASERT) DYNAMIC CONSTRAINT NETWORKS Univ of California	Pearl Judea	N 12 23/09/91 \$267,304	WAKSMAN 91-NM-376	
DIRECT COMPUTATION OF CONTROL INFORMATION FROM NONLINEAR IMPLICIT MODELS North Carolina State University	Campbell Stephen	N 36 09/09/91 \$133,891	JACOBS 91-NM-359	
CASERT) OPTIMIZATION PROBLEMS IN FUNCTION SPACES North Carolina State University	Kelley C. T.	N 36 23/09/91 \$93,618	GLASSMAN 91-NM-377	
THEORETICAL AERODYNAMICS Rensselaer Polytechnic Institute	Cole Julian	2 12 26/07/91 \$92,442	A NACHMAN 91-NM-322	\$92,442 01/11/91 \$92,442
MATHEMATICAL MODELS OF NON-LINEAR MECHANICAL AND ELECTRICAL SYSTEMS AND THEIR QUALITATIVE BEHAVIOR Rensselaer Polytechnic Institute	Levi Mark	N 36 02/08/91 \$256,170	A NACHMAN 91-NM-330	\$68,296 01/12/91 \$256,170
DECLARATIVE OBJECT-ORIENTED PROGRAMMING Rutgers, The State University	Shen Phillip Chen-Yu	N 24 12/07/91 \$124,935	HOLLAND 91-NM-311	
TARGET RECOGNITION BY IMAGE DECOMPOSITION USING GAUSSIAN WAVELET GROUPS WITH PARALLEL IMPLEMENTATION BY A LATTICE BASED NEURCOMPUTER Illinois Institute of Technology	Jezekiel Ben-Arie	N 36 01/07/91 \$231,956	WAKSMAN 91-NM-310	
DECIDING IN TIME Oregon State University	Amoroso Bruce	N 36 12/07/91 \$277,193	WAKSMAN 91-NM-316	

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MULTI-SENSOR SYSTEMS BASED ON ACTIVE SENSING AND LEARNING Old Dominion University	Rao Nageswara S	N 24 01/08/91 \$71,399	WAKSHAM 91-NM-324	
CONFOUNDING IN REGULAR, SINGLE REPLICATE FACTORIAL EXPERIMENTS Fright State University	Voss Daniel	N 36 13/09/91 \$61,340	SJOGREN 91-NM-374	
COMPRESSIBLE VORTEX FLOWS AND COMPRESSIBLE STABILITY Ohio State Univ Research Foundation	Wadonvi Richard	N 36 23/08/91 \$293,832	NACHMAN 91-NM-352	
POLISHING AND GRINDING OF AIRCRAFT CANOPIES AND OTHER OPTICAL SURFACES Univ of Pittsburgh	Hall Charles	N 36 14/08/91 \$185,125	NACHMAN 91-NM-341	
SENSOR SELECTION IN MULTIVARIABLE CONTROL Univ of Washington	Ly Uy-Loi	N 24 17/09/91 \$223,084	JACOBS 91-NM-365	
THE INSTITUTE FOR ADVANCED SCIENCE AND TECHNOLOGY AT THE UNIVERSITY OF PENNSYLVANIA Univ of Pennsylvania	Cooperman Barry	N 24 07/08/91 \$0	A HOLLAND 91-NM-336	\$0 30/09/91 \$0
THEORY AND APPLICATION OF HOMOTOPY TECHNIQUES IN NONLINEAR PROGRAMMING AND CONTROL SYSTEMS Virginia Polytechnic Inst & State Univ	Watson Layne	N 36 02/08/91 \$139,874	JACOBS 91-NM-332	
HOMOTOPY CONVERGENCE THEORY FOR NONLINEAR PROGRAMMING AND CONTROL SYSTEMS Virginia Polytechnic Inst & State Univ	Watson Layne	N 36 13/08/91 \$154,831	JACOBS 91-NM-338	
COMPUTATIONAL METHODS FOR CONTROL AND OPTIMAL DESIGN OF AEROSPACE SYSTEMS Virginia Polytechnic Inst & State Univ	Burns John	N 24 06/09/91 \$516,501	A JACOBS 91-NM-356	\$263,711 01/01/92. \$516,501

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AUTOMATIC TOOLS FOR DEVELOPING FINE-GRAINED SIGNAL PROCESSING PROGRAMS ON MULTICOMPUTERS Carnegie-Mellon University	J. Hillston David	N 36 12/09/91 \$395,466	A LUPO 91-NM-361	\$125,000 01/01/92 \$395,466
ENHANCING THE ELECTROMAGNETIC RESPONSE OF A COMPLEX SYSTEM Univ of New Mexico	Sinha	N 12 01/09/91 \$59,558	NACHMAN 91-NM-326	
DESIGN AND ANALYSIS OF MARKOV RANDOM FIELDS AND CHAINS AS APPLIED TO COMPUTATIONAL PROBLEMS Univ of North Carolina	Fishman George	N 36 20/09/91 \$301,423	SJOGREN 91-NM-375	
RESEARCH ON ACOUSTIC COUPLING TO ELECTROMAGNETIC PULSES IN TISSUE Harry E. Moses Applimath	Moses Harry	N 12 17/09/91 \$197,275	NACHMAN 91-NM-366	
DEVELOPMENT OF FUNCTION-BASED MODELS FOR GENETIC OBJECT RECOGNITION Univ of South Florida	Stark Louise	N 36 01/07/91 \$374,142	A WAKSMAN 91-NM-307	\$100,000 01/02/92 \$330,000
(AASERT) LPI SIGNAL DETECTION USING THE WAVELET TRANSFORM University of Kansas	Prescott Glenn	N 36 30/09/91 \$105,338	SJOGREN 91-NM-381	
FEATURE EXTRACTION BY BEST-BASIS WAVELET METHODS Washington University	Wickerhauser M. Victor	N 12 02/08/91 \$45,572	A SJOGREN 91-NM-328	\$45,572 01/12/91 \$45,572
OPTIMIZATION ALGORITHMS FOR INTEGER NETWORKS WITH SIDE CONSTRAINTS FOR APPLICATION IN ROUTING AND SCHEDULING Southern Methodist University	Kennington Jeffery	N 12 02/08/91 \$53,954	A GLASSMAN 91-NM-331	\$58,954 01/01/92 \$58,954
EXPLOITING SPECIAL STRUCTURE IN LARGE-SCALE USAF OPTIMIZATION MODELS Naval Post Graduate School	Bradley Gordon	N 24 17/09/91 \$198,880	A GLASSMAN 91-NM-367	\$99,440 01/12/92 \$99,440

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SIGNAL PROCESSING APPLICATIONS OF WAVELET THEORY Air Force Institute of Technology	Suter	Bruce	N 12 19/09/91 \$80,000	A SJOGREN 91-NM-372	\$70,000 15/10/91 \$70,000
LEARNING PARALLEL VISION ALGORITHMS Massachusetts Institute of Technology	Poggio	Tomaso	N 36 12/07/91 \$351,520	WAKSHAN 91-NM-314	
CUEING AND RECOGNITION Massachusetts Institute of Technology	Ullman	Shimon	N 36 12/07/91 \$329,982	WAKSHAN 91-NM-318	
PARALLEL AND DISTRIBUTED COMPUTING AND COMBINATORIAL ALGORITHMS Massachusetts Institute of Technology	Leighton	Frank	N 21 17/09/91 \$317,541	A GLASSMAN 91-NM-370	\$125,605 01/01/92 \$317,541
(AASERT) ANALYSIS, SYNTHESIS AND PROCESSING OF FRACTAL SIGNALS USING WAVELETS Massachusetts Institute of Technology	Oppenheim	Alan	N 36 19/09/91 \$281,656	SJOGREN 91-NM-371	
THEORETICAL STUDIES OF ULTRAFAST PHENOMENA Columbia University	Potasek	M	N 36 20/08/91 \$393,498	NACHMAN 91-NM-345	
(AASERT) COMPUTATIONAL FLUID DYNAMICS New York University	Garabedian	Paul	N 36 17/09/91 \$131,960	NACHMAN 91-NM-362	
RELIABLE COMMUNICATION IN THE PRESENCE OF SEVERE NOISE OR INTERFERENCE California Institute of Technology	McEliece	Robert	R 12 01/07/91 \$99,105	A GLASSMAN 91-NM-303	\$99,105 01/10/91 \$99,105
ADAPTIVE NEURAL NETWORKS Johns Hopkins University	Andreou	Andreas	N 36 19/08/91 \$284,431	SUDDARTH 91-NM-342	

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INSTITUTION

RESEARCH ON COLLABORATIVE PLANNING

Harvard University

INVESTIGATOR

JROIZ

Barbara

N 12
01/08/91
\$61,781

WARSHAN
91-NM-323

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SURFACE PROPERTIES OF REFRACTORY TRANSITION METAL CARBIDES Linfield Research Institute	Paul	N 36 16/07/91 \$472,610	A BARKER 91-NP-188	\$174,078 30/09/91 \$472,610
FORMATION AND ENHANCEMENT OF H(-) IONS IN A MAGNETICALLY FILTERED MULTICUSP ION SOURCE/MEASUREMENT OF NEUTRAL ATOM/MOLECULAR Lawrence Berkeley Laboratory	Ka-Ngo	N 12 16/07/91 \$157,925	A LUPO 91-NP-194	\$157,925 01/10/91 \$157,925
ADVANCED TECHNOLOGIES FOR HIGH-RESOLUTION SPECTROSCOPY National Inst. of Standards & Technology	David	N 12 15/07/91 \$165,000	KELLEY 91-NP-183	
IMAGING THE EARTH'S INTERIOR-DETAILED STUDIES OF THE EARTH'S SEISMIC STRUCTURE WITH NEW GLOBAL AND PORTABLE ARRAYS National Science Foundation	Janet	N 94 03/08/91 \$3,045,000	A LEWONOWICZ 91-NP-190	
SPACE-TIME PHYSICS (LANL RA-90-0300) (NETS-DK1-L042) Los Alamos Natl Lab--Ther Phys JV	Miller	N 12 16/07/91 \$200,000	A LUPO 91-NP-185	\$200,000 01/10/91 \$200,000
UV EMISSION CROSS SECTIONS BY ELECTRON IMPACT: APPLICATION TO UV DAYGLOW AND AURORAL SATELLITE OBSERVATIONS NASA - Natl Aeronautics and Space Admin	Joseph	N 12 18/07/91 \$131,600	A KELLEY 91-NP-187	\$131,600 01/10/91 \$131,600
ELECTRON-Beam CONTROLLED SEMICONDUCTOR SWITCHES Old Dominion University	Karl	N 12 16/07/91 \$50,000	A LUPO 91-NP-186	\$50,000 01/10/91 \$50,000
EXPERIMENTS WITH TRAPPED NEUTRAL ATOMS Office of Naval Research	Reynolds	N 12 19/07/91 \$66,000	A KELLEY 91-NP-189	\$66,000 01/10/91 \$66,000

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PROPERTIES OF NEW MATERIALS RELEVANT TO ENERGY AND FUEL RESEARCH National Hellenic Research Foundation	Nicolaidis Cleanthes	N 24 12/07/91 \$70,000	A OWENS 91-EX-019	\$30,000 30/09/91 \$70,000
IMPLEMENTATION OF THREAT DISCRIMINATION BY MOTION ANALYSIS FOR PASSIVE AIRBORNE WARNING SYSTEM (PAWS) ELISRA Electronic Sys Ltd--Alphoeve Sys	Lavi Meir	N 24 16/08/91 \$600,000	A OWENS 91-EX-020	\$100,000 30/09/91 \$600,000
ACOUSTO-OPTIC FREQUENCY SHIFTERS IN DUAL-CORE OPTICAL FIBERS Univ of Southampton	Russell Phillip St.	N 36 08/07/91 \$300,000	A OWENS 91-EX-018	\$99,022 30/09/91 \$300,000
FIBRE-COUPLED REMOTE OPTICAL VIBROMETRY Univ of Southampton	Johnson Mark	N 36 16/08/91 \$300,000	A OWENS 91-EX-021	\$92,700 30/09/91 \$300,000

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NATIONAL SPACE COUNCIL VICE PRESIDENT'S SPACE POLICY ADVISORY BOARD (VSPAB) SUPPORT Analytic Services Inc	Finn Robert	N 03 26/07/91 \$4,500	A YORK 91-XO-030	\$4,500 01/09/91 \$4,500
IMAGING THE EARTH'S INTERIOR-DETAILED STUDIES OF THE EARTH'S SEISMIC STRUCTURE WITH NEW GLOBAL AND PORTABLE ARRAYS National Science Foundation	Deill Daniel	N 02 08/09/91 \$3,945,000	A YORK 91-XO-031	\$3,845,000 01/08/91 \$3,845,000
NPL LIBRARY Naval Research Laboratory	Stackpole Laurie	N 01 14/08/91 \$2,900	A OWENS 91-XO-032	\$2,900 01/08/89 \$2,900
TEST CASE FOR COL STORIE Air Force Office of Scientific Research	scientist Idiot	N 12 21/08/91 \$0	A EWING 91-XO-033	\$0 30/09/91 \$15,185
SAMPLE CASE Air Force Office of Scientific Research	LKFJ:LAKJ S:LKDJ	N 12 23/08/91 \$221,000	A EWING 91-XO-034	
TRAVEL FUNDS FOR BELLER MEETING AFIT Air Force Institute of Technology	Beller Denis	N 03 19/07/91 \$10,000	A EWING 91-XO-029	\$2,833 01/07/91 \$10,000